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ANNUAL REPORT

OF THE

TRUSTEES

OF THE

WESTBOROUGH STATE HOSPITAL

FOR THE

YEAR ENDING NOVEMBER 30,

1933

DEPARTMENT OF MENTAL DISEASES

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WESTBOROUGH STATE HOSPITAL

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REPORT OF THE TRUSTEES

To His Excellency, the Governor, and the Honorable Council:

The Trustees of the Westborough State Hospital present this, their forty-ninth report.

In reviewing the operations of the hospital for the preceding year, only a few of the noteworthy activities will be described: recommendations for the ensuing year will be made; and the multitude of daily duties and accomplishments, which are necessary for its existence, will not be included.

One of the important items in the report of this year is the improvement in the mechanism for continuous baths which has been made by Dr. Lang. He has given much thought to changes, and to additions to forms already in use, which make the apparatus safer, more exact, more economical, and the producer of indisputable records. A detailed description will be given by him elsewhere in this report. As is recognized throughout this and other countries, the prolonged immersion in warm water is a remedial agent of great value in excitement, restlessness and sleep-

lessness. It is a gratification to all friends of the hospital to know that this superior method of hydrotherapy will be known as the Westborough System of Continuous Bath Control.

For approximately a century, since the opening of the State Reform School for Boys, which possessed a portion of the grounds and some of the buildings now occupied by this hospital, the supply of ice has been derived from the pond in the foreground of the administration centre. In recent years, mechanical refrigeration has been introduced into one building after another until electricity is now the agent which develops the necessary cold in each of the several scattered units of this institution. The automatic production of cold where wanted is preferable to the harvesting, stowing, and delivery of natural ice as in former years.

A noteworthy change has taken place, during the last half-centry, in one of the major positions of the State hospitals of this Commonwealth. In the early days, the treasurers were men: now they are women. The annual report of the Commissioner of Mental Diseases, for 1931, embraces 16 State Hospitals and schools; and the treaturer in each one of them is a woman. It may be assumed that the expenditures for salaries have been lessened by this change.

The training school for nurses of this hospital was established in October, 1889, 44 years ago; and the first class was graduated, November 4, 1891, after 2 years of study. During the intervening years, additional subjects have been added to the curriculum, and the course has been lengthened to 3 years for those desiring to be registered as trained nurses. In accordance with the recognized requirements, 5 of our nurses were graduated and received diplomas on the ninth day of the present month of November, 1933; and their addition increased the total number of graduates to 566.

If one should review the development of training schools, during several decades, that have passed, it would be evident that an important evolution has been in progress. It may be stated in a general way that few of the State hospitals of this country had established courses of instruction, a half century ago. When applicants were employed for the care of insane patients, they were assigned to wards and were given some directions by supervisors. Experience was their teacher. A similar regrettable condition existed then in other hospitals. In a medical magazine of recent date, an eminent physician described the methods of instruction of nurses, 50 years ago, in a well known Boston hospital, from which these extracts are made: —

> "The nurses were a queer lot . . . None of them were graduate nurses. Some had been dismissed from the training schools of other hospitals. One of them had been a failure as a school teacher. Another was beginning her career as an adventuress. But others were honest hardworking women who after a six-months course would be given certificates as 'monthly nurses.' . . . Another order . . . was that I should stop giving class lessons to the nurses . . My second order was for them to meet for a weekly lecture."

Since time immemorial, those who were sick desired intelligence, skill and sympathy in their care. The general hospitals responded first to this demand, and they organized courses of lectures and demonstrations for their attendants. Then books on nursing were needed and were prepared. When the good results of these efforts became manifest, the idea spread aboard that what was desirable for the sick in the community and the general hospitals would be beneficial also for the mentally sick in the State hospitals for the insane; and then the authorities of many hospitals decided to give their patients the advantages of skilled care. They established training schools and some of them required all attendants to become graduates or pupils in them. It was desirable that the graduates should be recognizable, and each school designed its own badge and uniform. After a time, it became evident that the training in some schools was superior to that in certain other schools; and Boards of Registration in Nursing were established in many of the States; and they framed standards of instruction that were required of those wishing to become registered nurses. Hours of duty, salaries, and food were specified, and the educational requirements for admission were raised. Many schools exchanged pupils with affiliated schools and hospitals, where other subjects were taught, and where their pupils could acquire experience in several specialties.

The two-year course was lengthened to three years, and the additional subjects required suggested the curriculum of a medical college. The graduates, who left the hospitals, were well received by the public. They were employed most of the time and at wages that attracted others to prepare for such work. Gradually training schools multiplied until apparently every hospital in the country, public or private, conducted one. Their output added enormously each year to those seeking employment in the care of the sick. The result has been that, in recent years, and especially during the present unparalleled depression, the supply of nurses is greater than the demand. To solve this problem of unemployment many training schools have decided to restrict the number of their graduates. That is the present policy in Massachusetts; and it is the same elsewhere. A recent letter from the superintendent of a New York State Hospital contains these extracts: —

> "This year only persons with full high school have been accepted for the training school and not many of them as our classes were getting larger than we could manage to the best advantage. The State of New York seems to be training nurses faster than it needs them and we have co-operated with the educational authorities in doing something to reduce the output."

Of course the continuous employment of all nurses is impossible. Outbreaks of disease have occurred when sufficient nurses were unobtainable even when the output of training schools was unrestricted. There will be seasonable variations for nurses as there are for doctors, railroad travel, and automobile production; and the public welfare requires such a supply of capable nurses as will be available under such variations as have occurred in the past and will occur in the future. A satisfactory policy of restriction will require a judgment approaching omniscience.

During the last two decades, there has been much thought given to the displacement of whole industries and their workers by new inventions and by new machinery "Taking up the slack" by more inventions has been the remedy prescribed. Masses of displaced workers have shifted from old to new forms of production. A similar evolution is recognizable among nurses. Some decades ago, they were seldom employed except in families or hospitals. As their skill and serviceability were recognized, they were drawn into other fields: positions were given them in schools, department stores, hotels, and drugs stores. They became social workers, laboratory technicians, physical therapeutists, dietitians, anesthetists, and dental nurses. Many of them proved their worth in doctors' offices: they were found to be too valuable to remain there, and the doctors took them to their homes and firesides. One may predict that other fields of usefulness will be added; and the evolution, that is evident already, will solve the problem of oversupply of nurses without artificial restrictions. But disregarding the question of their employment as nurses, the graduates form a large body of young women, who have obtained a broader view of life and a better preparation for many of the responsibilities of citizenship. Even if they return to their former homes, they will be better members of the family, more helpful neighbors in the community, and more competent wives for bearing and rearing children. This nation needs intelligent and qualified mothers. If the number of graduates be greatly restricted, is the refusal of an education a personal disappointment only, or is it a national loss? Binding the feet of women in China is one thing: binding the minds of women in American is another.

An unprecedented condition is present. Buildings here and elsewhere are to be erected with money advanced by the Federal Government, 30% being a grant and 70% being a loan to the Commonwealth. Until the present time, such expenditures have been made only by the Commonwealth. This year, however, President Roosevelt is endeavoring to relieve the distress of the four-year depression by giving work to the unemployed in the construction of buildings and for other purposes. In carrying out this plan, millions of dollars have been allotted to this State: commissions have been appointed by the State and by the National Government to advise, and to apportion and supervise expenditures; and a date in September was designated when plans should be presented for their consideration. In anticipation of such an invitation, Dr. Lang cooperated with the Department of Mental Diseases in preparing plans for additional buildings; and they were presented with specifications to the Commissioners as requested. When making these studies, a de-

parture from the customary procedure was made. Architects were employed here and elsewhere without the certainty of compensation; because no money was available until the finished plans had been received and approved by the several commissions in Boston and Washington. In the few weeks that have intervened, since the commissions began operations and the close of our fiscal year, November 30, five of our projects have been approved: —

Dining room building and kitchen, with bakery	$258,000
Laundry	59,000
Tunnel to assembly building	6,000
Root cellar and vegetable storage building	17,000
Nurses home to accommodate 135 nurses	257,000

Bids will be opened in December for the construction of these units; and work will be started as soon as possible after the awards have been made. Additional plans have been prepared and delivered to the authorities; but they have not, at the present time, been approved and returned from Washington. They are: — shop building; horse and hay barn; three cottages for employees; admission building for 150 patients.

It is necessary that six steps be taken for all projects before final approval can be obtained.

1. The Department of Mental Diseases, of which Dr. James V. May is commissioner.
2. The Emergency Public Works Commission, Henry Lefavour, Chairman.
3. The Budget Commissioner.
4. The Governor, Joseph B. Ely.
5. The Federal Board, appointed for Massachusetts by the Federal Government, Alvan T. Fuller, Chairman.
6. The Secretary of the Interior, Harold L. Ickes.

Finally, if each one of the six authorities has approved the project, it is returned from Washington to the Emergency Public Works Commission, in Boston. Another Agency, recently appointed for the employment of those without work, is The Civil Works Administration of Massachusetts, with Joseph W. Bartlett, Chairman; but its activities have not been felt here within the limit of this fiscal year. The hurried demand for picks, shovels and wheelbarrows was unanticipated and is so large that the supply is exhausted, and they are practically unobtainable.

As in other years, the members of the Consulting Board of Physicians and Surgeons and the members of the visiting staff have rendered service of great value to certain of our patients. Many operations have been performed and a great many examinations have been made by these skilled specialists. In order that the gratitude of the Trustees and Superintendent could be shown to them, the members of both medical groups were invited to luncheon at the hospital, on the 12th. of October. They brought their wives, they inspected parts of the hospital not seen when making their professional visits, they attended the weekly moving picture show; and all felt still more strongly the desire to do all in their power for the relief and cure of disordered minds and diseased bodies.

A former trustee of this hospital, Mr. John J. Shaughnessy, died on October 15, 1932. He succeeded Mr. William A. Cary, who had resigned in November, 1914; and he continued until his appointed by Governor Walsh had expired in 1918. He was born at Stow, Massachusetts, December 3, 1857; was graduated from the Amherst Agricultural College, in 1884; and from the Harvard Law School 1887; and was admitted to the Bar in the following year. He served as attorney for the First National Bank of Marlborough and as a director of that bank for approximately 25 years before his death. While Mayor of the City of Marlborough, in 1910 and 1911, came the noteworthy celebration of the 250th anniversary of the founding of the city. He was gifted as a speaker and was recognized as particularly successful as a trial lawyer.

The operations of another year have come to an end. All departments have cooperated in efforts to make the institution a success. The physicians have studied and labored, often into the nights, to help those in their care. The heads of departments have joined with the others for the efficient working of all the units of administration; and those under them have shown their desire to be their faithful

supporters. And over all has been the Superintendent, Dr. Lang, guiding the affairs of the institution with success through the harrowing days of this depression, and, adding to those labors, the study and oversight of plans for carrying out the desires of the Government in Washington. We can forsee with thankfulness the results in future years of his experience and good judgment in moulding the new with the old into a more serviceable and attractive refuge for minds in distress.

Respectfully submitted,

N. Emmons Paine, M.D., *Chairman* — Thomas F. Dolan,
Flora L. Mason, *Secretary* — John A. Frye,
Sewall C. Brackett, — Emily Young O'Brien,
John T. Neary, D.D.S., *Trustees.*

REPORT OF THE SUPERINTENDENT

To the Board of Trustees of the Westborough State Hospital:

The forty-eighth annual report of the Superintendent of the Westborough State Hospital is presented for your consideration. Matters pertaining to the movement of population and the appended statistical tables have reference to the statistical year ending September 30th, 1933, and all other matters to the fiscal year which terminated November 30th.

Movement of Patient Population

There were in the hospital at the end of the statistical year 1,504 patients; in family care 28, and otherwise absent from the hospital but under commitment 206, making a total of 1,738 persons in the care of the hospital on that date. The daily average number of patients actually in the hospital was 1,476.933 for the statistical year and 1,488.42 for the fiscal year.

Admissions

There were admitted to the hospital 520 new patients of which number 389 were first admissions, that is they were admitted to an institution for mental diseases for the first time. Of these first admissions 353 were insane and the statistics which follow will deal only with them. The number with senile psychosis was 5, or 1.416% and with psychoses with arteriosclerosis 95, or 26.912%, making in all 28.328% of first admissions due to changes incident to advanced age. General paralysis of the insane was present in 13 cases, or 3.682%; cerebral syphilis in 3, or .849%, this making 4.531% of first admissions resulting from syphilitic infection. Psychoses due to alcohol were found in 11 cases, or 3.116%, this being slightly less than last year. Manic-depressive psychoses were found in 61 cases, or 17.28%. Of these of the manic type, 43 of the depressed, and 2 of other types. Twenty-one were men, and 40 women. Involution melancholia was found in 4 men and 5 women, these being 2.549%. Dementia praecox was present in 109 cases, or 30.878%, a slightly larger percentage than last year. Psychosis with psychopathic personality was found in 6 cases, or 1.699%, and psychosis with mental deficiency in 18, or 5.099 per cent. Other psychoses occurring infrequently are shown in the statistical tables.

Readmissions

There were 111 patients who had previously been admitted to Hospitals for the Insane and 20 who were received by transfer from other hospitals under the control of the Department of Mental Diseases, and of these latter 6 were from public institutions and 14 from private.

Temporary Care and Observation

Forty-two patients were admitted for temporary care under the provisions of Section 79 and of these one died, 11 were committed for observation and 24 were regularly committed as insane, 5 were discharged as unimproved and one remained as a voluntary patient. One hundred and thirty-eight patients were admitted for 35 days observation. Of these 45 were discharged as being without psychoses, 3 as recovered, 1 as improved, 5 died, 2 remained as voluntary sane, and 82 were regularly committed as insane.

Discharges

Four hundred and sixty-five patients were discharged from the hospital and of

these 104 were deemed recovered, 61 improved, 36 unimproved, 55 not insane, 33 transferred to other hospitals, and 176 died. The percentage of deaths based upon the number under treatment was 6.24. The number discharged exclusive of deaths and transfers was 256, this being 51.2 per cent of admissions, exclusive of transfers.

Maintenance

Expenditures for maintenance amounted to $460,569.86. The weekly per capita cost was $5.9507, this being the lowest per capita cost since 1916. The following table shows the comparative per capita cost for the past six years. The gross income was $133,127.97, a per capita of $1.7201. This is the lowest income for many years. The net per capita cost was $4.2306, as compared with $5.1838 last year.

	Weekly Per Capita Cost					
	1928	1929	1930	1931	1932	1933
Personal services	$3.7075	$3.709	$3.8532	$4.1974	$4.0194	$3.5824
Travel, transportation and office	.0898	.090	.0926	.0928	.0915	.0729
Food	1.4667	1.552	1.4276	1.0767	.9864	.8381
Religious instruction	.0183	.018	.0195	.0212	.0203	.0179
Clothing and materials	.2375	.220	.2177	.2054	.1865	.1486
Furnishings and household supplies	.4493	.427	.4061	.3418	.3137	.2407
Medical and general care	.1944	.197	.1896	.1868	.1403	.1071
Heat, light and power	.6269	.532	.5570	.5381	.4624	.5009
Farm	.3209	.320	.2996	.2948	.2628	.2222
Grounds	.1123	.102	.0876	.0768	.0556	.0597
Repairs ordinary	.2112	.200	.1983	.2077	.1941	.1485
Repairs and renewals	.4055	.198	.1611	.2693	.2735	.0657
	$7.8403	$7.585	$7.5099	$7.5088	$7.0065	$5.9507

Improvements

In addition to the ordinary repairs and upkeep of the plant the following improvements were financed out of maintenance and accomplished by the hospital personnel: Installation of plumbing and continuous bath section in Childs Building, new shower and tub-room in male ward one, renewal of plumbing in West Wings one and three, laying 1,100 feet of 8″ sewer line including 3 manholes from a point near the Engineers' home to the site of the proposed new laundry building, with a branch to the present laundry; six inch heating mains at Richmond Colony were renewed; the six inch high pressure steam mains and the eight inch low pressure mains in the old boiler room were re-located and covered. The smoke-flue and uptakes in the boiler house at Warren Colony were renewed, and the boiler re-rubed. A new 2,500 volt cable was pulled in and connected from the power house to Childs Building. A large section of tin roof was replaced at Richmond Colony; oil burners were provided for the ranges in the kitchens of Durfee, Richmond, and Warren Colonies.

Special Appropriations

The only special appropriation made by the last Legislature for this hospital was the sum of $9,000 for the purchase and installation of electric refrigeration in sections not already so provided. At an expenditure of $8,957.23, we are now free from the necessity of using ice from Lake Chauncy which is a comfort as for several years past the ice has been exceedingly dirty, though as far as could be determined not definitely unhealthy.

Work of remodeling Childs Building was completed early in the year and the new arrangement has been found to work out very satisfactorily. The new serving-rooms and dining rooms add much to the convenience of those employed and to the quality of the service to the patients. The new porches are a great improvement, the pack unit convenient, and the continuous bath section in which our Westborough System of Continuous Bath Control is installed has met our fullest expectations. The Continuous Bath Control was installed after six months of experimentation and study with the following objects in mind:

(a) To automatically maintain at a predetermined temperature, the water actually in contact with the patient's body.

(b) To make a permanent record of that temperature.
(c) To provide extra means for protecting the patient from low or high temperature due to mechanical failure or human carelessness.
(d) To conserve water.

As far as could be determined all previous efforts at continuous bath control had consisted of mixing water at a point exterior to the tub, by means of mechanical or thermostatically controlled valves, and then permitting this mixed water to flow through the tub in relatively large amounts. This required the use of excessively large quantities of water, and the temperature of the water supplied and that of the resulting mixture in the tub, were frequently many degrees apart. The result was that in actual practice in many institutions, both for the purpose of conserving water and for maintaining the tub temperature somewhere near the desired point, it became a common practice to intermittently admit sufficient of the mixed water to bring the tub temperature from time to time to that desired. Usually this was done at fifteen minute intervals, the nurse or attendant using a hand thermometer in the tub to check the result. During the past few years installations have been made having the bulb of a recording thermometer introduced into the supply line to the tub on the tub side of the mixing valve with the provision for an audible alarm if the temperature thus recorded varied two degrees up or down from that predetermined. Such installations were found to operate satisfactorily only when a full and continuous flow was maintained. Water from any type of mixing valve known to the writer varies in temperature to such a degree that alarm bells in these installations are sounded with annoying frequency. To overcome these difficulties it was felt that the tub itself should be the mixing chamber, and that the temperature record should be that of the water in the center of the tub itself. To accomplish this, it appeared that it would be necessary to have the controlling thermometer bulb in the tub itself, which is obviously impracticable, or to find means of recording the temperature of the water on leaving the tub. The water leaving the tub by the usual surface overflow is of lower temperature than that in the center of the body of water, and is intermittent. It was felt that an auxiliary overflow through which there could be maintained constant circulation from the mid-level of the tub would accomplish the desired end. An opening was therefore provided in the foot-end of the tub midway between the bottom of the tub, and the surface overflow, and to this opening was attached, external to the tub, a vertical chamber containing the controlling thermometer bulb, and having from its upper end a ¾″ overflow pipe extending to the common overflow and discharging into it at a point one inch below the surface overflow of the tub. By this means it was found that constant flow of water from the tub over the thermometer bulb gave a temperature tracing parallel with, but two or three degrees below that in the center of the tub. Upon installing heavy insulation over the bulb chamber it was found that the temperature recorded therein was the same as that in the tub itself.

In order to use the tub as a mixing chamber it appeared necessary to find a controlling thermometer which would automatically admit sufficient water of a temperature a few degrees above that of the predetermined temperature for the tub water in sufficient quantities to maintain that temperature. Several were found on the market. Some admitted the water through motor-controlled valves, and others by means of diaphram valves operated by compressed air. Experiments were made over a considerable period with both types. The motor controlled valve of course was either open or entirely closed, whereas the compressed air operated diaphram valve could maintain an aperture just sufficient to admit a flow of water adequate to hold the temperature desired. The air operated valve had the additional advantage that the reserve supply of compressed air would continue it in operation for a period of two hours in case of a failure of current supply, and being opened against a powerful coil spring, on failure of air supply it would close immediately and protect the patient from any excess inflow of warm water. Following the use of an experimental installation over a period of six months with highly satisfactory result, a permanent installation of a six tub unit with all instruments grouped on a panel board, was made. The controlling recorders, with thermometer bulbs installed in the auxiliary overflow chambers, control compressed air operated diaphram valves which admit to the tub in the quantities needed water supplied through an ordinary thermostatic mixing valve at a temperature eight

degrees above that predetermined for the tub itself. The predetermined temperature can be set on scale in the controller and the supply can be regulated in temperature on the mixing valve itself. It has been found that if the supply of water is maintained at eight degrees above the predetermined temperature for the tub water the amount necessary to maintain the temperature within one degree is from sixteen to eighteen gallons an hour. Inasmuch as the best claim made by any manufacturer for his type of valve is to operate at 90 gallons an hour, the economy is obvious. A saving of 72 gallons an hour per tub, considering the cost of the water itself, the cost of elevating it to a standpipe and then of heating it to the temperature required, at this institution, amounts to 20 cents per 1,000 gallons. Operating as we do on a schedule of 24 hours a day our saving per tub per year is $127. Elsewhere, where the cost of water is greater than our extraordinary rate of 3 cents per 1,000 gallons, the saving would be greater.

The Westborough System consists of a six tub group with all instruments on a panel-board located directly in front of the nurses' desk. For each tub there is a controlling recorder, with its dial chart, tracing the temperature of the water in the tub it controls at all times. Should the temperature increase two degrees, a red bullseye is illuminated and an alarm sounds. (This has not occurred during automatic regulation over a period of eleven months except during daily tests of the apparatus). If the temperature is lowered two degrees, a green light appears. Alarm bells are controlled by separate switches and may be turned off pending the return of temperature to normal, thus not interfering with an alarm from another tub being heard should it occur. So much for the automatic operation.

Water of a higher temperature and in larger quantities than can be furnished through a valve of sufficiently small aperture for automatic control, is necessary for scrubbing and rinsing the tub. This is provided by a separate line to the tub and is controlled by a hand-operated thermostatic mixing valve with its dial thermometer on the panel-board. A three-way valve at the head of each tub prevents the two systems from operating at the same time. For scrubbing purposes water may be admitted in quantities at a temperature as high as 120 degrees and after rinsing the temperature may be reduced by the hand-controlled valve and the tub rapidly filled with water at the temperature desired for the bath. When the tub is thus filled, by a turn of the three-way valve, the filling supply is cut off and automatic regulation begins. The patient is then placed in the tub and her bath record is stamped with a time clock stamp, which being synchronized with the controller clock thus ties the two together in making a permanent and accurate record of the temperature of the water in which she was immersed throughout the period of her treatment. The bath record is again appropriately stamped when she is removed from the tub.

Development of the Hospital

For many years a study has been made of the development of the hospital to an ultimate capacity of 2,000 patients. Changes and renovations in the older buildings have been made with the developmental plan in mind and requests for special appropriations have been made for several years, consistent with this plan. These requests had the approval of the Department of Mental Diseases but because of the economic situation only a few were acted upon favorably by the Legislature. Plans however have been prepared with the cooperation of architects of experience and when the Federal Public Works Program was launched we were in position to present a building program, a large portion of which was approved by all necessary agencies and allotment of funds were made for the following projects.

(A) A new kitchen and diningroom building, including a bakery and a butcher shop. Federal allotment $257,000

(B) A laundry building, to be located to the rear and across the road from the present laundry building. Federal allotment $59,000

(C) A Nurses' Home, to be four stories in height and to provide single rooms for 135 persons. Federal allotment. $258,000

(D) An Industrial Building, in which the shops now located in various basements will be brought under one roof. Federal allotment . . $29,000

(E) A root cellar and vegetable storage building to be located in the Health Farm area. Federal allotment $17,000

(F) A tunnel from the main group to the assembly building which will permit convenient passage of patients to church or entertainments regardless of the weather. Federal allotment $6,000

The sum of $25,000 was requested for laundry equipment for the new laundry and although this request met with the approval of all State authorities it has not yet been approved at Washington. A hay barn, a horse barn and wagon shed unit estimated cost of which would be $30,000; an admission Building with treatment facilities for acute cases to cost $400,000 and three cottages for staff members, $30,000, were requested but as yet have not been acted upon favorably.

Special Appropriations Requested for 1934

Appropriations for the following projects have been requested of the 1934 Legislature: A hay barn, horse barn and wagon shed unit, $30,000; an admission building, $400,000; three cottages for staff members, $30,000; a building for 200 disturbed women patients, $350,000; painting and pointing the main group, $8,000; changes in the water system, $4,400; addition to garage, $4,600; renewing plumbing, Tablot Building, $6,000; remodeling of Richmond Sanitarium, $8,000 and enclosed fire escapes for West Wing $5,000.

Repairs and Renewals Requested for 1934

In our budget appropriations for the following items were requested as repairs and renewals: 1 metal scale pan, $75.; 18 laundry baskets with removable covers, $300.; a lathe for machine shop, $300; a portable pump, $250; a fire alarm system transmitter, $285; for painting standpipe, Durfee Colony, $970; re-wiring two female nurses' homes $500; roof repairs, main group, $400; shingling Heath Farm barn, $250; renewing steam and hot water lines, Durfee Colony $700; replacing vacuum traps, main building, $100; replacing obsolete water mixers $400; renewing water line, administration building, $400; barber shop equipment, $280; replacing dairy boiler, $740; replacing cow barn equipment, $434; oil burning equipment — Warren Boiler House, $1,560; and laying tile floor and plastering walls and ceiling of West Wing pack room, $2,150; total, $10,094.

Changes in Personnal

Dr. Emma H. Fay retired from the service of the hospital on March 28th, after 21 years of loyal and faithful service. She has a host of friends among both patients and employees who wish her much pleasure in the leisure which she now has opportunity to enjoy.

Dr. Harry M. Gardiner was appointed assistant physician on April 6th. Dr. Fred E. Stokey left the service of the hospital at the termination of the period for which he had been appointed, on April 30th. He has many friends who wish him much success.

Dr. Henry J. Kohler was appointed assistant physician May 30th.

Dr. Ada F. Davis because of ill health resigned June 10th. She had been loyal, diligent, and had put her whole strength into her work. Our wishes for her full recovery and success, it is felt, will be realized.

Dr. Bessie F. Brown was appointed assistant physician September first.

Medical Service

No new methods of treatment have been developed during the year. Therapeutic measures of proven value have been used energetically in efforts to ameliorate both physical and mental maladies of our patients. Upon admission all patients are placed in bed for a period of study and observation. Complete physical, neurological and mental examinations are made, laboratory studies are carried out and any therapy indicated immediately instituted. All are visited twice daily by a physician and notes of progress and mental reaction are made. A history is secured and social service investigation in the community undertaken and when all data are available the case is presented at staff conference for determination of diagnosis and the recommendations of staff members for therapy. Our hydrotherapeutic facilities have been increased and are used to the fullest extent principally in the forms of continuous bath treatment, neutral packs and colonic irrigations, these measures having been found through long experience to be the most valuable in the treatment of mental cases. Medical prescriptions are promptly

made where indicated, and a full time registered pharmacist assures us of their proper preparation and dispensing. Specific treatment of those afflicted with syphilitic disease is carried out vigorously along conventional lines. Our physicians are alert for the manifestations of surgical lesions and these are given prompt attention either by local treatment, physiotherapy in its various modalities as mentioned in a following paragraph, or by operation. Our Consulting Surgeons, who are all Fellows of the American College of Surgeons, are prompt in their attendance when summoned and have given cheerfully and generously of their time, skill, and experience. Members of the Consulting Board and Visiting Staff have made 236 special examinations and have performed 43 operations. We greatly appreciate their unselfish service.

Occupational therapy is prescribed and instituted early in many cases, ward class being conducted on the admission wards in order that the patient's attention may be engaged early and his mind diverted from distressing and troublesome thoughts. Two special rooms for occupational therapy are equipped for a wide variety of work. Classes are conducted at the Colonies, all under the direction of seven occupational therapists who have been specially trained for this work.

Laboratory Service

The scope of our laboratory service is shown below in the report of Dr. Lydia B. Pierce who in addition to her duties as pathologist directs all laboratory work, including x-ray service, physiotherapy and antisyphilitic treatments.

"During the year that has just passed there were completed by the workers in the laboratory 8,769 clinical tests of various kinds. This number compares favorably with that reported last year, which was 8,719. As always, the first consideration of this department has been to maintain a high standard of service to the patients, and to members of the clinical staff.

The scope of the work has been increased somewhat, and in conjunction with metabolism studies which have been in progress for several years a study of the cholesterol content of the blood in cases of dementia praecox, was begun late in the year. At the present time, our knowledge of cholesterol metabolism is far from complete, but a great deal of important work has been done with normal individuals and in various diseased conditions. Cholesterol is present in all animal tissues, and in the blood, and approximately 50% of the brain is composed of lipoid substances. The work of Rothschild, of Fasiani, and of Bloor and Knudson have established the fact that it is obtained from food, and is absorbed from the intestinal tract. It is found in two forms in the blood. A part of it is present as free cholesterol, and a part of it is in combination with the fatty acids to produce cholesterol esters. It is now quite definitely established that changes in the cholesterol content of the blood may be constantly found in certain diseases. It is diminished in anaemia, and is frequently increased in severe diabetes. It has been reported that hyper-cholesterolaemia is often present in nephritis, and always in nephrosis. It is also noted in cases of biliary stasis, in syphilis and in arteriosclerosis. In pregnancy, malignant disease and myxedema the cholesterol content of the blood has been reported to be increased, and changes from the normal amount have been found in some of the acute infections diseases, in pulmonary tuberculosis and in some skin diseases.

A number of workers have reported blood cholesterol determinations in cases of dementia praecox. The first of these was probably Pighini in 1910, and some of the others have been Parhon, Urechia and Popea, Decrinis, Gibbs, Forsyth and Shaw, and Sharpe. Their results have been contradictory. Some found increased values, and others reported low figures.

In view of the fact that many look upon dementia praecox as a mental disease which may be associated with profound disturbances in metabolism, it was felt that a study of the cholesterol content of the blood in a large series of these cases might be of value, as it would serve to supplement, or to confirm, the work that has already been done. The method used for determination is that of Bloor, Pelkan and Allen, and when the patient is sufficiently cooperative the basal metabolism is tested, and determinations of the non-protein nitrogen and sugar content of the blood are made. The patient's age, blood pressure, weight and height have been carefully noted and analyses of twenty-four hour amounts of urine have been made.

At this time twenty cases have been studied, a number of which is obviously too small from which to draw conclusions.

Another phase of work which is routinely conducted under the direction of the laboratory, deserves mention. The venereal disease clinic furnishes treatment not only to the patients who are resident in the hospital, but physicians from the surrounding towns are referring an increasing number of patients for anit-syphilitic therapy. These are often cases of recent infection, which yield most gratifying results to arsphenamine and mercury medication.

The following is a list of the work done throughout the year: Analyses, gastric content: ocult blood, 1; vomitus, 1; autopsies, 26; Babcock milk tests, 588; basal metabolism tests, 63; blood chemistry: cholesterol, 26; cholesterol esters, 23; sugar, 68; N. P. nitrogen, 32; uric acid, 8; urea, 3; creatinin, 6; blood counts: red cell, 249; white cell, 635; differential 353; haemoglobin percentage, 657; blood fragility tests, 26; blood clotting time, 10; reticulocyte counts, 3; blood smears for malaria, 1; cultures, 331; faeces, 1; faeces for ova, 1; frozen sections, 4; Hintons, 328; inoculations, 2; renal function tests, 3; sections stained, 57; smears; bacterial, 343; spinal fluid examinations: cytological count, 37; albumin, 37, colloidal gold, 38; sputa, 103; tests for bile, 2; tissue specimens, 74; tissues cut; 77; treatments: Arsphenamine, 621; mercury, 423; urinalyses, routine, 3,411, 24 hour: ammonia, 23; creatinin 1; sugar, 12; total nitrogen, 1; T. B. 1; urea 7; uric acid, 1; vaccines, autogenous, 1; Van den Bergh tests, 2; x-rays, 80.

Physiotherapy Department

A large number of patients were treated, and the usefulness of the department was extended by the Burdick Morse Wave Generator, which was installed in November, 1932. It has given gratifying results, in conjunction with diathermy, in the treatment of fractures, after the removal of casts or splints. It has proved it's value in cases of intestinal stasis and in the treatment of motor neuron lesions, to prevent deformities.

The following list of treatments given is submitted: Infra-red, 1,272; ultra-violet, 594; auto-condensation, 96; diathermy, 89; vacuum tube, 106; electric coagulations, 39; massage, 806; Morse Wave, 486; total, 3,488.

There were 489 radiographs taken. Of these, 353 were for patients, 121 were for employees, 10 were for boys sent from the Lyman School, and five were for patients referred by physicians in the community."

Dental Service

Nothing new has developed in the dental field as related to the treatment of mental patients during the year. Our resident dentist and his assistant have given their full time to the work of the department. As soon as the condition of newly admitted patients will permit a complete dental examination is made, the mouth charted, and steps taken immediately to put the mouth and teeth in healthy condition. Needed extractions are done, cement and amalgam fillings provided and cleaning and scaling carried out in all cases without expense to patients or their relatives. If plate work, bridgework, or other expensive procedure is necessary the relatives, if able are expected to bear the expense of it. If they are unable to do so and the work is necessary for the maintenance of the patients' health it is done at the expense of the hospital. Treatment of the mouth and gums where indicated is carried out vigorously and instruction in the care of the teeth is given to all. The following indicates in part the scope of the work of this department: Bridgework, set and fitted, 17; removed and cleaned, 18; crowns set and re-set, 19; cleaning and scaling, 4,224; examining and charting, 3,996; extractions, 1,256; filing teeth, 476; fillings: amalgam, 1,101; cement, 1,025; synthetic, 578; temporary, 572; plates: impression, bite and shade, 11; cleaned, 804; fitted and filed, 440; repaired, 42; treatments: gums 3,084; oil of clove, 1,071; number of patients with work completed, 1,762; number of visits, 4,226; x-rays taken, 17.

Extramural Activities

Dr. Betsy Coffin has continued in charge of all extramural activities and associated with her have been a psychometrist, a social worker and a nurse-stenographer. The following is an extract from her report:

"Under this department of the hospital's activities are included the out-patient

clinics, one child guidance clinic, school clinics, examinations for the assigned juvenile courts, talks to various community groups, medical and psychiatric care of patients in family care.

The largest of the out-patient clinics, which serve patients released on indefinite visit from the hospital, is the Boston clinic long held at the Massachusetts Memorial Hospitals, each Tuesday. The Waltham clinic grew to such proportions during the year that a second evening each month was allotted to it. The Framingham clinic is a busy one. The Marlborough clinic and the clinic held in the Westborough State Hospital have increased as to average attendance. In addition to the patients visiting the clinics regularly, there are twenty-five with whom the hospital keeps in regular touch by letter each month. Understanding of the purpose and service of the clinics has grown in the minds of the patients attending and their cooperation is very satisfactory. Members of the patient's family are interviewed and an effort made to assist them to constructive attitudes toward the patients with counsel as to practical procedure. A few selected cases chosen on the basis of the patient's desire and readiness for treatment are given time outside of regular clinic hours, which allow more frequent and long interviews. In this way some permanent help is given and the periods of productive activity and normal social life prolonged. The social service department cooperates constantly with a trained understanding of mental illness to give the services they are particularly prepared to offer, as for example, guidance in home adjustment, recreational problems, and many more.

The interest and welfare of the patient as the dominating goal has been stressed at the expense of new ventures. There has been, therefore, no effort at expansion of activities but a concentration upon improving the quality of service given to the patients, courts, and schools with whom the department deals. Organization has been simplified and improved to the above end.

The child guidance clinic of Framingham has not been allowed to expand beyond the personnel and time allotted to it but has been carried on intensively and with a satisfactory number of new cases and a gratifying response from parents and community. Two clinics a week are held and there have been 254 interviews with children and 107 with parents, most frequently the mother. In addition to the psychiatrist's work is that of the social worker who cooperates closely in her special field.

The number of school clinic cases varies from year to year. Seventy-one retarded children were examined this year by psychiatrist and psychometrist and social histories obtained. In addition 36 pre-school children were seen by psychiatrist and psychometrist for determination of M.A. and advisability of entering first grade. Each examination of a school child entails a summary of the problem with recommendations which is sent to the child's superintendent for guidance and reference. As much follow up as is possible is also done.

Twenty-one Juvenile Court Cases have been examined and reported on. Courts have asked for recommendations and in many cases the social worker has been present at the court session to present and interpret the findings and advice given."

Social Service Department

The personnel of this department consists of a head social worker and an assistant social worker. The first mentioned position has been vacant throughout the year. The department however has been fortunate in having the assistance of a volunteer social worker who has rendered excellent and painstaking service. Social work has been done in connection with out-patient clinics, child guidance clinics, school clinics, and in other fields requiring such professional knowledge and skill including investigation in observation and court cases, the following up of patients on visit, the supervision of those in family care, securing employment for and subsequently supervising patients released on visit to employers. The following is an extract from the report of the acting head social worker:

"The number of hospital cases carried by the department has not increased materially over other years because it has been necessary for one worker to spend a great deal of time on the cases of the child guidance clinic. Eighty-five histories were taken. Eighty-four investigations of home conditions of both in-patients and out-patients were made. Fifty-eight cases were carried for supervision. On

the aforementioned cases 951 visits were made. Fifty-eight calls were made in performing personal services for patients.

In the child guidance clinic, 21 cases were carried for the year sixteen of which were new cases. Thirteen histories were obtained. There was a total of 391 visits made. This number seems rather small but in view of the fact that the clinic is not a full time one, it is adequate in comparison to other similar clinics.

The workers ttended during the year 217 out-patient clinics in Westborough, Boston, Lowell, Waltham, and Framingham. In these clinics all patients are contacted by the worker and aid and advice is given in many cases which are not recorded formally as social service cases. By attendance at the out-patient clinics the workers are able to keep in touch with a great many more patients on visit than would be otherwise possible because of the wide distribution of the out-patient population of this hospital.

Histories were obtained for six juvenile court cases on which forty visits were obtained. Because of the fine contact this hospital has with the courts under whose jurisdiction these cases came, the worker has attended the juvenile sessions in which they were called and interpreted the findings of the clinic examination of the juvenile to the court.

School clinics in Webster, Dudley and Southbridge were attended at which sixty-six histories were obtained.

The family care homes, six in number, have been visited by workers in the department. These visits have been more in the nature of friendly calls than anything else because of the excellent contact of all the care-takers with the hospital as well as the high standards of the homes. Patients in these homes seem to look, forward to and enjoy the attention they consider they receive in a visit from anyone connected with the hospital.

In order to relieve somewhat an unexpected pressure of cases, all thirty-five day observation cases have been taken on automatically. If at the end of three weeks residence in the hospital a history has not been obtained from relatives or friends by the physicians or if there is any dubious point to be cleared up, the department takes on the case without referral from the physician and obtains the necessary information before the day on which the case is presented before the staff for diagnosis and determination of committability. Although this has not done away entirely with the necessity of getting information between the twenty-five and thirty day period, it has helped a great deal in planning the work of the department over a certain period. Because of the varied character of the work few cases for long time intensive work have been carried but with the building up of an organization and the future possibility of additional workers in the clinics, this phase of social work will be developed."

Training School for Nurses

The training school for nurses continues with the full three year course, one of which is spent in affiliation at a general hospital. The course given is that specified in this state and that it is well conducted is evidenced by the fact that our graduates readily pass the examinations required for registration in nursing in this and other states. Whereas formerly only two years of high school education was required for admission to the school, members of the new class who entered in October were required to have a full four years high school course. This reduced the number of applicants very considerably but those selected appear to be of good material. The junior class, twelve in number, received 294 hours of instruction and the seniors of whom there are ten, received 304 hours.

On November 9 the graduating exercises were held and 5 nurses whose names follow received diplomas: Florence Allen Grinnell, Sara Christine MacFarlane, Violet Maude Miller, Alberta Barbara Swipp, and Elizabeth Agnes Wood. The Alumnae prize to the member of the graduating class ranking highest in theory and practice was awarded to Miss Sara C. MacFarlane.

In addition to their other duties those conducting the training school gave a course of instruction to both male and female attendants. This course consists of forty hours, and requires to be repeated during the year. Eighteen men and ten women graduated from this course and received certificates.

Occupational Therapy Department

As mentioned elsewhere in this report occupational therapy continues to be of great value in the treatment of our patients, both those recently admitted and those who have been resident in the hospital for a considerable period. Classes in the two rooms set aside for the purpose as well as those on the admission wards and at the colonies are operated regularly and when the pressure of work will permit additional classes among the disturbed women have been found to be very advantageous. In addition to their ordinary activities the personnel of this department have conducted entertainments, parties, picnics, and other recreational diversions and during the season have assisted with groups of their patients in gardening and in canning the products of the farm.

The furniture shop, shoe shop, the broom, mattress and upholstering shop provide opportunity for the occupation and diversion of a number of male patients not only to their benefit but to the direct economic advantage of the institution.

Farm

The outstanding achievement of the farm in 1933, was the crop of late potatoes. The early potatoes were a failure owing to weather conditions but the total crop was 3,363 bushels. This was the highest yield in ten years. Incidentally the hospital produced the largest number of bushels per acre in Worcester County's 300 Bushel Potato Club.

The silos were filled with a crop of excellent ensilage corn. More hay was harvested this year than last. Rowen did not amount to much, owing to lack of moisture. Spring seedings of grass were a failure for the same reason. Likewise, millet did not do well this year.

The garden produced very well on the whole, but because of weather conditions plantings of carrots, beets and turnips seeded for winter use failed to mature. There was late blight on tomatoes this fall. This is the first time we have been bothered with it, and the effect was disastrous.

The apple crop was abundant. The trees show the result of pruning they have received during the past three years.

More dressed pork was produced this year than in any year since 1928, and there is a good crop of young shoats coming along.

The cattle made a good showing with a yearly average of 13,467 lbs. of milk per cow. There are at present 133 head, of which 61 are in milk. In order to house the young stock, a portion of the wagon shed has been made into a shelter for some of the larger heifers. The old sheep shed has been renovated and accommodates 12 to 15 of the medium sized young stock. All of the cattle passed the T. B. test in November. We need a new cattle unit in order to properly house the growing herd. The animals are growing to larger size than the tieups in the milking barn can accommodate.

Farm production for 1933 was as follows: Milk, 79,063 lbs., beef 11,063 lbs., pork 78,448 lbs., ensilage 526 tons, hay 244 tons, green feed 267 tons, rowen 10.7 tons, corn fodder 30 tons, mangels, 52 tons, potatoes 3,363 bushels, apples 2,600 bushels, grapes 240 lbs., pears 1,450 lbs., strawberries 486 boxes, asparagus 1,918 lbs., string beans 24,587 lbs., beets 35,030 lbs., beet greens 2,868 lbs., cabbage 76,520 lbs., canteloupe 3,582 lbs., carrots 57,113 lbs., cauliflower 513 lbs., celery 4,849 lbs., chard 24,287 lbs., sweet corn, 40,368 lbs., cucumbers 5,348 lbs., lettuce 9,709 lbs., onions 30,959 lbs., parsnips 36,065 lbs., pears 2,824 lbs., peppers 3,233 lbs., pumpkins 4,085 lbs., radishes 1,708 lbs., rhubarb 14,461 lbs., summer squash 28,326 lbs., tomatoes 54,495 lbs., turnips 63,065 lbs., spinach 5,612 lbs.

Grounds

Owing to shortage of funds very little was done on the grounds this year, except for the usual care. Some of the shade trees that have been in bad shape since the ice storm of 1921 were pruned.

An improved road was constructed and curb placed in front of Talbot Building. The stretch of main road between Talbot and the tennis court was also rebuilt and curbed. These roads were surfaced with asphalt and trap rock.

The flower garden and greenhouse continue to be productive. The production included 6,175 potted plants and 5,475 bouquets.

Entertainment

The new assembly hall has been the centre of much entertainment during the year. The talking pictures which have been shown one afternoon and evening each week except during the summer months have been very popular both with patients and employees. Many patients in the hospital had never previously seen this type of entertainment. The hospital orchestra, under the direction of Dr. Fiedler has increased in size and has 15 members. Dances are given from time to time for the patients which they much appreciate and enjoy. The hospital chorus which met weekly during the winter under the direction of Professor Millington of Marlborough held its annual concert on May 10, and those participating were much applauded. The Marlborough High School Orchestra, which is directed by Professor Millington, came to the hospital on June 9th. and gave a concert of high quality which was very enjoyable. The Christmas holiday program which extended over eight days gave great pleasure to those who were obliged to be in the hospital at that time. As usual we are greatly indebted to the American Legion Auxiliaries of Grafton, Shrewsbury, Upton, Westborough, Fisherville, Milford, Whitinsville, Hopedale and Southborough for the entertainments which they have brought at regular intervals to the former soldiers in the hospital. Under the auspices of the Southborough Auxiliary groups of men were taken in May to a ball game and luncheon at Southborough and in September to a band concert given by the boy scouts of Southborough.

Patient's Library

The activities of the library have been much curtailed during the past year because of the lack of a librarian. Our large magazine distribution however has been maintained and an average of over 600 delivieres and exchanges of books per month have been made. Traveling libraries of fifteen books each, to be kept one month, are circulated from ward to ward. A new card catalog of the library has been nearly completed. It is felt that the best cannot be gotten from the library until an employee adequately trained can be put in charge and devote her entire time to the work.

Conclusion

In this review of the year's activities I am impressed with the great part played in them by department heads and other employees and I wish to express my gratitude for the loyal and efficient manner in which they have carried on and to share with them the credit for such progress and improvement in our service as we may have made.

To members of the Medical staff, whose duties are many and trying, and whose hours are long, I am grateful for their efforts in maintaining and improving our standards of care of our patients. The newer members have shown a zeal and interest which holds much promise for their future success.

To the members of your Board for your interest, encouragement, support, and friendly counsel, I am much indebted.

Respectfully submitted,

Walter E. Lang, M. D.

Superintendent.

VALUATION

November 30, 1933

Real Estate

Land, 763.93 acres	$68,770.00
Buildings	1,239,018.22
	$1,307,788.22

Personal Property

Travel, transportation and office expenses	$4,004.24
Food	7,330.36
Clothing and materials	17,274.78
Furnishings and household supplies	143,558.63
Medical and general care	13,151.77
Heat and other plant operation	68,212.43
Farm	57,946.84
Garage and grounds	8,330.86
Repairs	2,919.71
	$322,729.62

SUMMARY

Real estate	$1,307,788.22
Personal property	322,729.62
	$1,630,517.84

FINANCIAL REPORT

To the Department of Mental Diseases:

I respectfully submit the following report of the finances of this institution for the fiscal year ending November 30, 1933.

STATEMENT OF EARNINGS

Board of patients		$129,474.20
Personal services:		
Reimbursement from Board of Retirement		180.06
Sales:		
Travel, transportation and office expenses	$35.94	
Food	2,209.79	
Clothing and materials	6.27	
Furnishing and household supplies	7.57	
Medical and general care	16.77	
Heat and other plant operation	–	
Garage and grounds	.17	
Repairs ordinary	40.52	
Repairs and renewals	–	
Arts and crafts sales	–	
Miscellaneous	–	
Farm (itemize) cows and calves, $164.50; hides, $72.48; Blacksmithing, $1.66; bags, $91.70; barrels, $4.00; tools, $2.00.	336.34	
Total sales		2,653.37
Miscellaneous:		
Interest on bank balances	$114.84	
Rents	705.50	
Total, miscellaneous		820.34
Total earnings for the year		$133,127.97

MAINTENANCE APPROPRIATION

Balance from previous year, brought forward		$5,160.54
Appropriation, current year		460,300.00
Total		$465,460.54
Expenditures as follows:		
1. Personal services	$273,088.90	
2. Food	64,870.92	
3. Medical and general care	8,291.27	
4. Religious instruction	1,384.00	
5. Farm	17,199.14	
6. Heat and other plant operation	38,765.30	
7. Travel, transportation and office expenses	5,646.60	
8. Garage and grounds	4,617.35	
9. Clothing and materials	11,498.30	
10. Furnishings and household supplies	18,630.17	
11. Repairs ordinary	11,494.90	
12. Repairs and renewals	5,083.01	
Total maintenance expenditures		$460,569.86
Balance of Maintenance appropriation, November 30, 1933		$4,890.68

SPECIAL APPROPRIATIONS

Balance December 1, 1932, brought forward		$7,769.50
Appropriations for current year		9,000.00
Total		$16,769.50
Expended during the year (see statement below)	$15,919.94	
Reverting to Treasury of Commonwealth	*849.56	
(Star balances below that are reverting)		16,769.50
Balance November 30, 1933, carried to next year		–

APPROPRIATION	Act or Resolve Chap. Year	Amount Appropriated	Expended during Fiscal year	Total Expended to date	Balance at end of year
Renovation Childs building	245–1931	$27,000.00	$6,587.08	$26,995.81	$4.19*
Assembly building equipment	268–1931	85,000.00	–	84,368.54	631.46*
Furnishings Farm dormitory	170–1932	8,000.00	375.63	7,828.86	171.14*
Electric refrigeration	174–1933	9,000.00	8,957.23	8,957.23	42.77*
		$129,000.00	$15,919.94	$128,150.44	$849.56*

PER CAPITA

During the year the average number of patients has been, 1,488.420.
Total cost of maintenance, $460,569.86.
Equal to a weekly per capita cost of (52 weeks to year), $5.9507.
Total receipts for the year, $133,127.97.
Equal to a weekly per capita of, $1.7201.
Total net cost of Maintenance for year, (Total Maintenance less total receipts), $327,441.89.
Net weekly per capita, $4.2306.

Respectfully submitted,
CARRIE G. POOR,
Treasurer.

STATISTICAL TABLES

AS ADOPTED BY THE AMERICAN PSYCHIATRIC ASSOCAITION PRESCRIBED BY THE MASSACHUSETTS DEPARTMENT OF MENTAL DISEASES

TABLE 1. *General Information*

Data correct at end of hospital year November 30, 1933

1. Date of *opening* as a hospital for mental diseses, December 1, 1886.
2. Type of hospital: State.
3. Hospital plant:
   Value of hospital property:

Real estate, including buildings	$1,307,788.22
Personal property	322,729.62
Total	$1,630,517.84

   Total acreage of hospital property owned, 763.93.
   Total acreage under cultivation during previous year, 316.15.
4. Officers and employees:

	Actually in Service at End of Year			Vacancies at End of Year		
	M.	F.	T.	M.	F.	T.
Superintendents	1	–	1	–	–	–
Assistant physicians	5	3	8	–	–	–
Total physicians	6	3	9	–	–	–
Stewards	1	–	1	–	–	–
Resident dentists	1	–	1	–	–	–
Pharmacists	–	1	1	–	–	–
Graduate nurses	–	24	24	–	–	–
Other nurses and attendants	67	53	120	–	1	1
Occupational therapists	2	8	10	–	–	–
Social workers	–	2	2	–	1	1
All other officers and employees	82	57	139	3	–	3
Total officers and employees	159	148	307	3	2	5

NOTES: — The following items, 5–10 inclusive, are for the year ended September 30, 1933

5. Census of patient population at end of year:

	Actually in Hospital			Absent from Hospital but Still on Books		
WHITE:	M.	F.	T.	M.	F.	T.
Insane	604	858	1,462	112	120	231
Mental defectives	–	1	1	–	–	–
Alcoholics	–	–	–	1	–	1
Drug addicts	–	1	1	–	–	–
All other cases	4	6	10	–	–	–
Total	608	866	1,474	112	120	232
OTHER RACES:						
Insane	20	10	30	1	1	2
Total	20	10	30	1	1	2
Grand Total	628	876	1,504	113	121	234

	Males	Females	Total
6. Patients under treatment in occupational-therapy classes, including physical training, on date of report	50	193	243
7. Other patients employed in general work of hospital on date of report	230	308	538
8. Average daily number of all patients actually in hospital during year	626.132	850.801	1,476.933
9. Voluntary patients admitted during year	1	3	4
10. Persons given advice or treatment in out-patient clinics during year	93	124	217

TABLE 2. *Financial Statement*

See Treasurer's report for data requested under this table.

NOTE: — The following tables 3–20, inclusive, are for the statistical year ended September 30, 1933.

TABLE 3. *Movement of Patient Population*

	Regular Court Commitment (Insane)			Voluntary			Temporary Care			Observation			Total on Books		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Patients on books of institution September 30, 1932	709	961	1,670	5	5	10	–	–	–	1	2	3	715	968	1,683
Admissions during year:															
First admissions	156	197	353	1	2	3	4	2	6	16	11	27	177	212	389
Readmissions	41	39	80	–	1	1	–	–	–	18	12	30	59	52	111
Transfers from other hospitals for mental diseases	6	14	20	–	–	–	–	–	–	–	–	–	6	14	20
Total received during year	203	250	453	1	3	4	4	2	6	34	23	57	242	278	520
Total on books during year	912	1,211	2,123	6	8	14	4	2	6	35	25	60	957	1,246	2,203
Discharged from books during year:															
As recovered	47	54	101	–	–	–	–	–	–	2	1	3	49	55	104
As improved	24	36	60	–	–	–	–	–	–	–	1	1	24	37	61
As unimproved	13	17	30	–	–	–	3	2	5	–	1	1	16	20	36
As without psychosis	3	–	3	3	4	7	–	–	–	28	17	45	34	21	55
Transferred to other hospitals for mental diseases	18	15	33	–	–	–	–	–	–	–	–	–	18	15	33
Died during year	72	98	170	–	1	1	1	–	1	2	2	4	75	101	176
Total discharged, transferred and died during year	177	220	397	3	5	8	4	2	6	32	22	54	216	249	465
Insane patients remaining on books of hospital at end of hospital year:															
In hospital	623	870	1,493	2	3	5	–	–	–	3	3	6	628	876	1,504
On parole or otherwise absent	113	121	234	–	–	–	–	–	–	–	–	–	113	121	234
Total	736	991	1,727	2	3	5	–	–	–	3	3	6	741	997	1,738

NOTE: — The total males in Insane and Voluntary groups will not balance through September 30, 1933 owing to the fact that one male voluntary patient had a C.L.S. during the year to an R.C. 51 thus making the males on Voluntary status minus one and the males on R.C. status one more than would be expected.

TABLE 4. *Nativity of First Admissions and of Parents of First Admissions*

NATIVITY	PATIENTS			PARENTS OF MALE PATIENTS			PARENTS OF FEMALE PATIENTS		
	M.	F.	T.	Fathers	Mothers	Both Parents	Fathers	Mothers	Both Parents
United States	99	122	221	51	49	41	71	63	57
Austria	–	–	–	1	–	–	–	–	–
Canada[1]	19	26	45	24	28	22	29	31	34
China	1	–	1	1	1	1	–	–	–
Denmark	1	–	1	1	1	1	–	–	–
England	3	7	10	5	4	3	14	16	11
Finland	1	–	1	2	2	2	2	2	2
France	–	–	–	1	–	–	–	–	–
Germany	1	1	2	2	2	2	2	2	1
Greece	–	2	2	–	–	–	2	2	2
Hungary	–	–	–	1	1	1	–	–	–
Ireland	10	17	27	37	42	34	43	47	37
Italy	11	6	17	15	15	15	7	6	6
Mexico	–	1	1	–	–	–	1	1	1
Norway	1	–	1	1	1	1	–	–	–
Philippine Islands	–	–	–	–	–	–	–	1	–
Poland	–	4	4	–	–	–	3	2	2
Portugal	–	2	2	–	–	–	2	3	2
Russia	–	1	1	–	–	–	6	6	6
Scotland	1	3	4	3	–	–	4	5	3
Spain	1	–	1	1	1	1	1	–	–
Sweden	2	–	2	3	3	3	2	2	2
West Indies[2]	1	–	1	1	1	1	1	–	–
Other countries	4	5	9	5	5	5	5	5	5
Unascertained	–	–	–	1	–	–	2	3	2
Total	156	197	353	156	156	133	197	197	163

[1]Includes Newfoundland.

[2]Except Cuba and Porto Rico.

TABLE 4-A. *Age of First Admissions Classified with Reference to Nativity, and Length of Residence in the United States of the Foreign Born*

AGE GROUPS	Aggregate			NATIVE BORN														FOREIGN BORN											
				Total			PARENTAGE											Total			TIME IN UNITED STATES BEFORE ADMISSION									
							Native			Foreign			Mixed			Unascertained						Under 5 years			5–9 years			10–14 years			15 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 15 years	–	2	2	–	2	2	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15–19 years	4	8	12	4	8	12	3	5	8	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20–24 years	12	8	21	10	8	18	2	2	4	6	3	9	2	3	5	–	–	–	2	1	3	–	–	–	–	–	–	–	–	–	2	1	3
25–29 years	18	14	32	16	14	30	6	6	12	6	6	12	4	2	6	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–	2	–	2
30–34 years	9	10	19	8	4	12	2	2	4	4	–	4	2	2	4	–	–	–	1	6	7	–	–	–	–	–	–	–	1	1	1	5	6
35–39 years	7	21	28	3	9	12	–	4	4	3	3	6	–	2	2	–	–	–	4	12	16	–	1	1	–	–	–	–	–	–	4	11	15
40–44 years	13	19	32	8	11	19	3	6	9	1	2	3	4	3	7	–	–	–	5	8	13	–	–	–	–	–	–	–	–	–	5	8	13
45–49 years	16	22	38	7	14	21	2	6	8	3	2	5	2	6	8	–	–	–	9	8	17	–	1	1	–	–	–	–	–	–	9	7	16
50–54 years	12	19	31	8	11	19	1	6	7	5	2	7	2	3	5	–	–	–	4	8	12	–	–	–	–	1	1	–	–	–	4	7	11
55–59 years	15	21	36	9	11	20	7	2	9	1	5	6	1	4	5	–	–	–	6	10	16	–	–	–	–	–	–	–	–	–	6	10	16
60–64 years	11	18	29	4	12	16	2	7	9	1	4	5	1	1	2	–	–	–	7	6	13	–	–	–	–	–	–	–	–	–	7	6	13
65–69 years	15	14	29	7	8	15	2	5	7	4	2	6	1	1	2	–	–	–	8	6	14	–	–	–	–	–	–	–	–	–	8	6	14
70 years and over	24	20	44	15	10	25	11	4	15	4	2	6	–	2	2	–	2	2	9	10	19	–	–	–	–	–	–	–	–	–	9	10	19
Total	156	197	353	99	122	221	41	57	98	39	34	73	19	29	48	–	2	2	57	75	132	–	2	2	–	1	1	–	1	1	57	71	128

TABLE 5. *Citizenship of First Admissions*

	Males	Females	Total
Citizens by birth	99	122	221
Citizens by naturalization	15	21	36
Aliens	42	54	96
Total	156	197	353

TABLE 6. *Psychoses of First Admissions*

PSYCHOSES	M.	F.	T.	M.	F.	T.
1. Traumatic psychoses				3	–	3
2. Senile psychoses				4	1	5
3. Psychoses with cerebral arteriosclerosis				41	54	95
4. General paralysis				10	3	13
5. Psychoses with cerebral syphilis				1	2	3
6. Psychoses with Huntington's chorea				–	–	–
7. Psychoses with brain tumor				2	–	2
8. Psychoses with other brain or nervous diseases, total				2	2	4
Meningitis, tubercular or other forms	1	–	1			
Other diseases	1	2	3			
9. Alcoholic psychoses, total				10	1	11
Korsakow's psychosis	1	–	1			
Acute hallucinosis	5	1	6			
Other types, acute or chronic	4	–	4			
10. Psychoses due to drugs and other exogenous toxins, total				–	–	–
11. Psychoses with pellagra				–	–	–
12. Psychoses with other somatic diseases				2	8	10
Delirium with infectious diseases	–	1	1			
Cardio-renal diseases	–	3	3			
Other diseases or conditions	2	4	6			
13. Manic-depressive psychoses, total				21	40	61
Manic type	6	10	16			
Depressive type	15	28	43			
Other types	–	2	2			
14. Involution melancholia				4	5	9
15. Dementia praecox (schizophrenia)				44	65	109
16. Paranoia and paranoid conditions				–	–	–
17. Epileptic psychoses				1	2	3
18. Psychoneuroses and neuroses, total				1	–	1
Psychasthenic type (anxiety and obsessive forms)	1	–	1			
19. Psychoses with psychopathic personality				2	4	6
20. Psychoses with mental deficiency				8	10	18
21. Undiagnosed psychoses				–	–	–
22. Without psychosis, total				–	–	–
Total				156	197	353

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses*

RACE	Total			Traumatic			Senile			With cerebral arterio-sclerosis			General paralysis		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	3	5	8	–	–	–	–	–	–	1	–	1	1	1	2
Armenian	1	1	2	1	–	1	–	–	–	–	–	–	–	–	–
Chinese	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
English	52	71	123	–	–	–	2	–	2	18	28	46	2	–	2
Finnish	2	2	4	–	–	–	–	–	–	–	–	–	–	–	–
French	9	11	20	–	–	–	–	–	–	3	–	3	1	1	2
German	2	3	5	–	–	–	–	–	–	1	2	3	–	–	–
Greek	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	1	6	7	–	–	–	–	–	–	–	–	–	–	–	–
Irish	52	57	109	1	–	1	–	–	–	14	17	31	4	1	5
Italian[1]	15	7	22	–	–	–	1	–	1	1	4	5	–	–	–
Lithuanian	2	3	5	–	–	–	–	1	1	1	–	1	–	–	–
Mexican	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Portuguese	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	5	2	7	1	–	1	–	–	–	1	–	1	–	–	–
Scotch	4	5	9	–	–	–	1	–	1	–	2	2	–	–	–
Slavonic[3]	1	5	6	–	–	–	–	–	–	–	–	–	–	–	–
Spanish	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1
Turkish	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	4	13	17	–	–	–	–	–	–	1	1	2	1	–	1
Total	156	197	353	3	–	3	4	1	5	41	54	95	10	3	13

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses* — Continued

RACE	With cerebral syphilis			With brain tumor			With other brain or nervous diseases			Alcoholic			With other somatic diseases			Manic-depressive		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Armenian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Chinese	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
English	–	–	–	2	–	2	1	1	2	1	–	1	1	3	4	7	11	18
Finnish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2
French	–	1	1	–	–	–	–	–	–	1	–	1	–	–	–	1	3	4
German	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Greek	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3
Irish	1	–	1	–	–	–	–	1	1	6	–	6	–	2	2	6	11	17
Italian[1]	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	2	2	4
Lithuanian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mexican	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Portuguese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1	–	–	–
Scotch	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	4
Slavonic[3]	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1	–	2	2
Spanish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	–	–	–	–	–	–	–	–	–	–	1	1	–	1	1	1	4	5
Total	1	2	3	2	–	2	2	2	4	10	1	11	2	8	10	21	40	61

[1]Includes "North" and "South"
[2]Norwegians, Danes and Swedes.
[3]Includes Bohemian, Bosnian, Croatian, Delmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.

TABLE 7. *Race of First Admissions Classified with Reference to Principal Psychoses* — Concluded

RACE	Involution melancholia			Dementia praecox			Epileptic psychoses			Psycho-neuroses and neuroses			With psycho-pathic personality			With mental deficiency		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African (black)	–	–	–	1	3	4	–	–	–	–	–	–	–	–	–	–	–	–
Armenian	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Chinese	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
English	2	–	2	10	21	31	–	–	–	1	–	1	1	2	3	4	5	9
Finnish	–	–	–	–	1	1	1	–	1	–	–	–	–	–	–	–	–	–
French	–	1	1	2	3	5	–	1	1	–	–	–	–	–	–	1	1	2
German	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Greek	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Hebrew	–	–	–	–	3	3	–	–	–	–	–	–	–	–	–	1	–	1
Irish	1	1	2	17	20	37	–	1	1	–	–	–	–	1	1	2	2	4
Italian[1]	–	–	–	9	1	10	–	–	–	–	–	–	1	–	1	–	–	–
Lithuanian	–	–	–	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–
Mexican	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Portuguese	–	–	–	–	3	3	–	–	–	–	–	–	–	–	–	–	–	–
Scandinavian[2]	–	–	–	2	1	3	–	–	–	–	–	–	–	–	–	–	–	–
Scotch	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Slavonic[3]	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–
Spanish	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Turkish	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
Mixed	–	–	–	1	4	5	–	–	–	–	–	–	–	–	–	–	2	2
Total	4	5	9	44	65	109	1	2	3	1	–	1	2	4	6	8	10	18

[1]Includes "North" and "South".
[2]Norwegians, Danes, and Swedes.
[3]Includes Bohemian, Bosnian, Croatian, Delmatian, Herzegovinian, Montenegrin, Moravian, Polish, Russian, Ruthenian, Servian, Slovak, Slovenian.

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			Under 15 years			15–19 years			20–24 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	–	–	–	–	–	–	–	–	–
2. Senile	4	1	5	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	41	54	95	–	–	–	–	–	–	–	–	–
4. General paralysis	10	3	13	–	–	–	–	–	–	–	–	–
5. With cerebral syphilis	1	2	3	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	2	2	4	–	–	–	–	–	–	–	1	1
9. Alcoholic	10	1	11	–	–	–	–	–	–	–	–	–
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	–	–	–	–	–	–	1	–	1
13. Manic-depressive	21	40	61	–	1	1	2	2	4	1	2	3
14. Involution melancholia	4	5	9	–	–	–	–	–	–	–	–	–
15. Dementia praecox	44	65	109	–	–	–	1	5	6	8	4	12
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	–	1	–	–	–	1	–	1	–	–	–
19. With psychopathic personality	2	4	6	–	–	–	–	1	1	1	–	1
20. With mental deficiency	8	10	18	–	1	1	–	–	–	1	2	3
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–
Total	156	197	353	–	2	2	4	8	12	12	9	21

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses* — Continued

PSYCHOSES	25–29 years			30–34 years			35–39 years			40–44 years			45–49 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Senile	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
4. General paralysis	–	–	–	–	1	1	–	–	–	–	–	–	3	1	4
5. With cerebral syphilis	–	–	–	–	–	–	–	1	1	–	1	1	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	1	–	1	1	–	1
8. With other brain or nervous diseases	–	–	–	–	1	1	–	–	–	1	–	1	1	–	1
9. Alcoholic	1	–	1	1	–	1	1	–	1	2	–	2	2	–	2
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	–	1	1	–	–	–	–	–	–	–	2	2	–	2	2
13. Manic-depressive	1	3	4	3	1	4	1	5	6	2	4	6	1	5	6
14. Involution melancholia	–	–	–	–	–	–	–	–	–	–	1	1	2	1	3
15. Dementia praecox	12	8	20	5	5	10	5	13	18	7	9	16	4	10	14
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	–	1	1	–	–	–	–	–	–	–	1	1	1	–	1
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psy'pathic personality	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
20. With mental deficiency	4	1	5	–	2	2	–	1	1	–	1	1	1	1	2
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	18	14	32	9	10	19	7	21	28	13	19	32	16	22	38

TABLE 8. *Age of First Admissions Classified with Reference to Principal Psychoses* — Concluded

PSYCHOSES	50–54 years			55–59 years			60–64 years			65–69 years			70 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	1	–	1	1	–	1	1	–	1	–	–	–	–	–	–
2. Senile	–	–	–	–	–	–	1	1	2	2	–	2	1	–	1
3. With cerebral arteriosclerosis	1	2	3	2	8	10	5	10	15	11	12	23	22	20	42
4. General paralysis	3	1	4	4	–	4	–	–	–	–	–	–	–	–	–
5. With cerebral syphilis	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
9. Alcoholic	1	–	1	–	1	1	1	–	1	1	–	1	–	–	–
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	–	2	2	–	–	–	–	1	1	–	–	–	1	–	1
13. Manic-depressive	3	7	10	4	5	9	2	4	6	1	1	2	–	–	–
14. Involution melancholia	–	1	1	1	2	3	1	–	1	–	–	–	–	–	–
15. Dementia praecox	1	6	7	1	3	4	–	1	1	–	1	1	–	–	–
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psy'pathic personality	1	–	1	–	2	2	–	–	–	–	–	–	–	–	–
20. With mental deficiency	1	–	1	1	–	1	–	1	1	–	–	–	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	12	19	31	15	21	36	11	18	29	15	14	29	24	20	44

TABLE 9. *Degree of Education of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			Illiterate			Reads and writes			Common School			High School			College		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	1	–	1	–	–	–	2	–	2	–	–	–	–	–	–
2. Senile	4	1	5	2	1	3	–	–	–	2	–	2	–	–	–	–	–	–
3. With cerebral arteriosclerosis	41	54	95	–	3	3	1	3	4	37	40	77	2	5	7	1	3	4
4. General paralysis	10	3	13	–	–	–	2	–	2	6	2	8	1	1	2	1	–	1
5. With cerebral syphilis	1	2	3	–	–	–	–	–	–	1	1	2	–	1	1	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	–	–	–	–	–	–	1	–	1	1	–	1	–	–	–
8. With other brain or nervous diseases	2	2	4	–	1	1	1	–	1	1	–	1	–	1	1	–	–	–
9. Alcoholic	10	1	11	1	–	1	–	–	–	7	1	8	2	–	2	–	–	–
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	–	1	1	–	–	–	2	5	7	–	2	2	–	–	–
13. Manic-depressive	21	40	61	–	1	1	–	2	2	12	26	38	7	9	16	2	2	4
14. Involution melancholia	4	5	9	–	1	1	–	–	–	3	4	7	1	–	1	–	–	–
15. Dementia praecox	44	65	109	–	–	–	4	–	4	29	44	73	10	13	23	1	8	9
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	–	–	–	–	–	–	1	–	1	–	1	1	–	1	1
18. Psychoneuroses and neuroses	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
19. With psychopathic personality	2	4	6	–	–	–	–	–	–	2	3	5	–	1	1	–	–	–
20. With mental deficiency	8	10	18	2	1	3	1	2	3	5	7	12	–	–	–	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	156	197	353	6	9	15	9	7	16	112	133	245	24	34	58	5	14	19

TABLE 10. *Population of Place of Residence of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			0–2,499			2,500–9,999			10,000–24,999			25,000–49,999			50,000–99,999			100,000–249,999			250,000–499,999			500,000+			Unknown		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	–	–	–	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–
2. Senile	4	1	5	–	–	–	1	1	2	1	–	1	1	–	1	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
3. With cerebral arteriosclerosis	41	54	95	3	4	7	6	6	12	10	8	18	6	10	16	2	4	6	13	20	33	–	–	–	1	2	3	–	–	–
4. General paralysis	10	3	13	1	–	1	–	–	–	–	–	–	1	1	2	3	–	3	5	1	6	–	–	–	–	1	1	–	–	–
5. With cerebral syphilis	1	2	3	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	2	2	4	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	1	2	3	–	–	–	–	–	–	–	–	–
9. Alcoholic	10	1	11	–	–	–	2	1	3	3	–	3	–	–	–	–	–	–	4	–	4	–	–	–	1	–	1	–	–	–
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	–	–	–	–	2	2	–	–	–	2	2	4	–	1	1	–	3	3	–	–	–	–	–	–	–	–	–
13. Manic-depressive	21	40	61	–	1	1	1	4	5	8	6	14	3	12	15	3	3	6	5	11	16	–	–	–	–	3	3	1	–	1
14. Involution melancholia	4	5	9	–	–	–	–	1	1	1	1	2	1	1	2	1	–	1	1	1	2	–	–	–	–	1	1	–	–	–
15. Dementia praecox	44	65	109	2	3	5	4	5	9	7	8	15	9	11	20	2	7	9	19	23	42	–	–	–	1	8	9	–	–	–
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	2	4	6	–	–	–	1	–	1	–	1	1	–	1	1	1	1	2	–	1	1	–	–	–	–	–	–	–	–	–
20. With mental deficiency	8	10	18	–	1	1	1	1	2	–	–	–	1	2	3	–	–	–	6	6	12	–	–	–	–	–	–	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	156	197	353	7	10	17	18	21	39	31	25	56	25	40	65	13	16	29	57	70	127	–	–	–	4	15	19	1	–	1

TABLE 11. *Economic Conditions of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			Dependent			Marginal		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	–	–	–	3	–	3
2. Senile	4	1	5	–	–	–	4	1	5
3. With cerebral arteriosclerosis	41	54	95	–	6	6	41	48	89
4. General paralysis	10	3	13	1	–	1	9	3	12
5. With cerebral syphilis	1	2	3	–	–	–	1	2	3
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	–	–	–	2	–	2
8. With other brain or nervous diseases	2	2	4	–	–	–	2	2	4
9. Alcoholic	10	1	11	–	–	–	10	1	11
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	–	–	–	2	8	10
13. Manic-depressive	21	40	61	–	–	–	21	40	61
14. Involution melancholia	4	5	9	–	–	–	4	5	9
15. Dementia praecox	44	65	109	–	–	–	44	65	109
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	–	–	–	1	2	3
18. Psychoneuroses and neuroses	1	–	1	–	–	–	1	–	1
19. With psychopathic personality	2	4	6	–	–	–	2	4	6
20. With mental deficiency	8	10	18	–	1	1	8	9	17
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–
Total	156	197	353	1	7	8	155	190	345

TABLE 12. *Use of Alcohol by First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			Abstinent			Temperate			Intemperate		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	2	–	2	1	–	1	–	–	–
2. Senile	4	1	5	2	1	3	1	–	1	1	–	1
3. With cerebral arteriosclerosis	41	54	95	26	52	78	10	2	12	5	–	5
4. General paralysis	10	3	13	7	2	9	1	1	2	2	–	2
5. With cerebral syphilis	1	2	3	–	2	2	–	–	–	1	–	1
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	2	–	2	–	–	–	–	–	–
8. With other brain or nervous diseases	2	2	4	1	2	3	–	–	–	1	–	1
9. Alcoholic	10	1	11	–	–	–	–	–	–	10	1	11
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	2	8	10	–	–	–	–	–	–
13. Manic-depressive	21	40	61	17	39	56	–	–	–	4	1	5
14. Involution melancholia	4	5	9	2	5	7	1	–	1	1	–	1
15. Dementia praecox	44	65	109	30	59	89	10	2	12	4	4	8
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	1	2	3	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	–	1	1	–	1	–	–	–	–	–	–
19. With psychopathic personality	2	4	6	2	4	6	–	–	–	–	–	–
20. With mental deficiency	8	10	18	6	9	15	–	1	1	2	–	2
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychoses	–	–	–	–	–	–	–	–	–	–	–	–
Total	156	197	353	101	185	286	24	6	30	31	6	37

TABLE 13. *Marital Condition of First Admissions Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			Single			Married			Widowed			Separated			Divorced		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	–	3	1	–	1	2	–	2	–	–	–	–	–	–	–	–	–
2. Senile	4	1	5	1	–	1	1	–	1	2	1	3	–	–	–	–	–	–
3. With cerebral arteriosclerosis	41	54	95	4	16	20	26	15	41	10	22	32	1	–	1	–	1	1
4. General paralysis	10	3	13	6	–	6	3	2	5	–	1	1	1	–	1	–	–	–
5. With cerebral syphilis	1	2	3	–	–	–	–	2	2	1	–	1	–	–	–	–	–	–
6. With Huntington's chorea	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7. With brain tumor	2	–	2	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–
8. With other brain or nervous diseases	2	2	4	1	1	2	1	1	2	–	–	–	–	–	–	–	–	–
9. Alcoholic	10	1	11	4	1	5	5	–	5	1	–	1	–	–	–	–	–	–
10. Due to drugs and other exogenous toxins	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
11. With pellagra	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
12. With other somatic diseases	2	8	10	1	2	3	–	3	3	1	3	4	–	–	–	–	–	–
13. Manic-depressive	21	40	61	9	14	23	11	19	30	1	5	6	–	–	–	–	2	2
14. Involution melancholia	4	5	9	1	1	2	3	3	6	–	1	1	–	–	–	–	–	–
15. Dementia praecox	44	65	109	31	34	65	11	25	36	1	4	5	1	1	2	–	1	1
16. Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17. Epileptic psychoses	1	2	3	–	1	1	1	1	2	–	–	–	–	–	–	–	–	–
18. Psychoneuroses and neuroses	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
19. With psychopathic personality	2	4	6	2	2	4	–	1	1	–	1	1	–	–	–	–	–	–
20. With mental deficiency	8	10	18	7	8	15	1	1	2	–	1	1	–	–	–	–	–	–
21. Undiagnosed psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22. Without psychosis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	156	197	353	69	80	149	67	73	140	17	39	56	3	1	4	–	4	4

TABLE 14. *Psychoses of Readmissions*

PSYCHOSES	Males	Females	Total
Senile psychoses	–	1	1
Psychoses with cerebral arteriosclerosis	3	1	4
General paralysis	1	–	1
Psychoses with cerebral syphilis	1	–	1
Alcoholic psychoses	3	1	4
Manic-depressive psychoses	14	15	29
Involution melancholia	1	1	2
Dementia praecox	17	18	35
Psychoses with psychopathic personality	–	1	1
Psychoses with mental deficiency	–	1	1
Without psychosis	1	–	1
Total	41	39	80

TABLE 15. *Discharges of Patients Classified with Reference to Principal Psychose and Condition on Discharge*

PSYCHOSES	Total			Recovered			Improved			Unimproved		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Traumatic	2	1	3	–	1	1	1	–	1	1	–	1
Senile	2	5	7	1	2	3	1	2	3	–	1	1
With cerebral arteriosclerosis	7	9	16	2	3	5	4	4	8	1	2	3
General paralysis	1	–	1	–	–	–	1	–	1	–	–	–
With cerebral syphilis	–	1	1	–	–	–	–	–	–	–	1	1
With other brain or nervous diseases	–	1	1	–	–	–	–	1	1	–	–	–
Alcoholic	9	3	12	8	2	10	1	1	2	–	–	–
Due to drugs and other exogenous toxins	2	–	2	2	–	2	–	–	–	–	–	–
With other somatic diseases	2	1	3	2	1	3	–	–	–	–	–	–
Manic-depressive	38	35	73	26	27	53	7	6	13	5	2	7
Involution melancholia	1	7	8	–	6	6	–	–	–	1	1	2
Dementia praecox	17	37	54	4	9	13	8	18	26	5	10	15
Paranoia and paranoid conditions	–	1	1	–	–	–	–	1	1	–	–	–
Epileptic psychoses	–	1	1	–	–	–	–	1	1	–	–	–
Psychoneuroses and neuroses	–	1	1	–	–	–	–	1	1	–	–	–
With psychopathic personality	1	2	3	1	1	2	–	1	1	–	–	–
With mental deficiency	2	2	4	1	2	3	1	–	1	–	–	–
Without psychosis	3	–	3	–	–	–	–	–	–	–	–	–
Total	87	107	194	47	54	101	24	36	60	13	17	30

TABLE 15-A. *Hospital Residence During This Admission of First Court Admission Discharged during 1933*

PSYCHOSES	Number			Average Net Hospital Residence in Years		
	M.	F.	T.	M.	F.	T.
Traumatic	1	1	2	.09	.50	.30
Senile	2	5	7	1.00	2.05	1.75
With cerebral arteriosclerosis	6	9	15	.50	.43	.46
With cerebral syphilis	–	1	1	–	.29	.29
With other brain or nervous diseases	–	1	1	–	.50	.50
Alcoholic	9	3	12	.60	.83	.65
Due to drugs and other exogenous toxins	1	–	1	.88	–	.88
With other somatic diseases	2	1	3	.73	.50	.65
Manic-depressive	24	27	51	1.27	.96	1.11
Involution melancholia	1	6	7	.20	3.00	2.61
Dementia praecox	14	30	44	.98	.96	.97
Paranoia and paranoid conditions	–	1	1	–	.50	.50
Psychoneuroses and neuroses	–	1	1	–	.50	.50
With psychopathic personality	1	–	1	.79	–	.79
With mental deficiency	1	2	3	2.50	.69	1.29
Without psychoses	3	–	3	.50	–	.50
Total	65	88	153	.96	1.06	1.02

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Psychoses*

CAUSES OF DEATH	Total			Senile			With cerebral arterio-sclerosis			General paralysis			Alcoholic			Manic-depressive		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Epidemic, Endemic and Infectious Diseases																		
Tuberculosis of the respiratory system	2	5	7	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2
Syphilis (non-nervous forms)	2	2	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General Diseases not Included in Class I																		
Cancer and other malignant tumors	1	3	4	–	–	–	–	–	–	–	–	–	–	1	1	1	1	2
Tumor (non-cancerous)	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diabetes	–	4	4	–	–	–	–	2	2	–	–	–	–	–	–	–	1	1
Other general diseases	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Nervous System																		
Memingitis (non-epidemic)	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cerebral hemorrhage, apoplexy	2	1	3	–	–	–	1	–	1	–	–	–	1	–	1	–	–	–
General paralysis of the insane	10	3	13	–	–	–	–	–	–	10	3	13	–	–	–	–	–	–
Diseases of the Circulatory System																		
Pericarditis	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Endocarditis and myocarditis	17	25	42	–	3	3	10	14	24	–	–	–	2	–	2	1	2	3
Arteriosclerosis	20	36	56	1	3	4	15	29	44	–	–	–	–	–	–	1	1	2
Other diseases of the circulatory system	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Respiratory System																		
Bronchitis	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bronchopneumonia	2	1	3	–	1	1	2	–	2	–	–	–	–	–	–	–	–	–
Lobar pneumonia	1	2	3	–	1	1	–	1	1	–	–	–	–	–	–	–	–	–
Other diseases of the respiratory system (tuberculosis excepted)	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Digestive System																		
Diseases of the pharynx and tonsils	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Hernia and intestinal obstruction	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Non-Venereal Diseases of Genito-Urinary System and Annexa																		
Nephritis	2	3	5	–	–	–	1	1	2	–	–	–	–	–	–	1	–	1
Other diseases of kidneys and annexa	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
External Causes																		
Suicide	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidental traumatism	2	3	5	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1
Other external causes	1	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	72	98	170	1	8	9	28	48	77	10	3	13	3	1	4	5	8	13

TABLE 16. *Causes of Death of Patients Classified with Reference to Principal Psychoses* — Concluded

CAUSES OF DEATH	Dementia praecox			Paranoia and paranoid conditions			Epileptic psychoses			With psychopathic personality			With mental deficiency			*All other psychoses		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Epidemic, Endemic and Infectious Diseases																		
Tuberculosis of the respiratory system	2	2	4	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Syphilis (non-nervous forms)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	4
General Diseases not Included in Class I																		
Cancer and other malignant tumors	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tumor (non-cancerous)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	2
Diabetes	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other general diseases	–	2	2	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Diseases of the Nervous System																		
Meningitis (non-epidemic)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Cerebral hemorrhage, apoplexy	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis of the insane	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Circulatory System																		
Pericarditis	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	1	–	1
Endocarditis and myocarditis	3	5	8	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2
Arteriosclerosis	1	3	4	–	–	–	1	–	1	–	–	–	1	–	1	–	–	–
Other diseases of the circulatory system	–	1	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–
Diseases of the Respiratory System																		
Bronchitis	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bronchopneumonia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Lobar pneumonia	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other diseases of the respiratory system (tuberculosis excepted)	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Diseases of the Digestive System																		
Diseases of the pharynx and tonsils	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Hernia and intestinal obstruction	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Non-Venereal Diseases of Genito-Urinary System and Annexa																		
Nephritis	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Other diseases of kidneys and annexa	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
External Causes																		
Suicide	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Accidental traumatism	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other external causes	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1
Total	11	22	33	–	1	1	2	–	2	1	–	1	2	2	4	8	5	13

*Includes group 22, "without psychosis."

TABLE 17. *Age of Patients at Time of Death Classified with Reference to Principal Psychoses*

PSYCHOSES	Total			15–19 years			20–24 years			25–29 years			30–34 years			35–39 years			40–44 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Senile	1	8	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	29	48	77	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis	10	3	13	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	2	2
With cerebral syphilis	2	2	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
With Huntington's chorea	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With brain tumor	3	–	3	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	1	–	1
With other brain or nervous diseases	1	1	2	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	1	–	1
Alcoholic	3	1	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other somatic diseases	1	2	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Manic-depressive	5	8	13	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Dementia praecox	11	22	33	–	–	–	1	–	1	1	–	1	1	–	1	1	3	4	–	4	4
Paranoia and paranoid	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Epileptic psychoses	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
With psychopathic personality	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	2	2	4	1	–	1	–	1	1	–	–	–	–	–	–	–	1	1	–	–	–
Total	72	98	170	1	–	1	1	2	3	2	–	2	2	1	3	1	4	5	3	8	11

PSYCHOSES	45–49 years			50–54 years			55–59 years			60–64 years			65–69 years			70 years and over		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Senile	–	–	–	–	–	–	–	–	–	–	–	–	–	3	3	1	5	6
With cerebral arteriosclerosis	–	1	1	1	1	2	3	2	5	1	5	6	5	7	12	19	32	51
General paralysis	3	1	4	2	–	2	3	–	3	1	–	1	–	–	–	–	–	–
With cerebral syphilis	–	–	–	–	–	–	1	1	2	1	–	1	–	–	–	–	–	–
With Huntington's chorea	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
Witl. brain tumor	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other brain or nervous diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic	–	–	–	–	–	–	–	–	–	1	–	1	1	1	2	1	–	1
With other somatic diseases	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	1	–	1
Manic-depressive	–	–	–	1	1	2	2	–	2	2	3	5	–	1	1	–	2	2
Dementia praecox	–	2	2	1	3	4	1	–	1	1	2	3	1	2	3	3	6	9
Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Epileptic psychoses	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
With psychopathic personality	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Total	4	4	8	6	6	12	11	3	14	7	10	17	7	14	21	27	46	73

TABLE 18. *Total Duration of Hospital Life of Patients Dying in Hospital Classified According to Principal Psychoses*

PSYCHOSES	Total			Less than 1 month			1–3 months			4–7 months			8–12 months			1–2 years			3–4 years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Senile	1	8	9	–	–	–	–	1	1	–	–	–	–	–	–	–	3	3	1	1	2
With cerebral arteriosclerosis	29	48	77	8	7	15	3	9	12	3	5	8	4	5	9	4	14	18	5	4	9
General paralysis	10	3	13	1	1	2	1	–	1	1	–	1	–	–	–	4	1	5	–	–	–
With cerebral syphilis	2	2	4	–	1	1	–	–	–	–	–	–	2	–	2	–	–	–	–	1	1
With Huntington's chorea	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With brain tumor	3	–	3	1	–	1	–	–	–	2	–	2	–	–	–	–	–	–	–	–	–
With other brain or nervous diseases	1	1	2	1	–	1	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–
Alcoholic	3	1	4	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	1	1
With other somatic diseases	1	2	3	–	1	1	–	–	–	1	1	2	–	–	–	–	–	–	–	–	–
Manic-depressive	5	8	13	–	–	–	1	–	1	–	–	–	–	–	–	–	2	2	1	1	2
Dementia praecox	11	22	33	–	–	–	2	1	3	–	–	–	–	1	1	1	1	2	1	5	6
Paranoia and paranoid conditions	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Epileptic psychoses	2	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With psychopathic personality	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
With mental deficiency	2	2	4	–	–	–	–	1	1	–	–	–	–	–	–	1	–	1	–	–	–
Total	72	98	170	11	10	21	7	12	19	8	6	14	6	6	12	11	22	33	8	13	21

PSYCHOSES	5–6 years			7–8 years			9–10 years			11–12 years			13–14 years			15–19 years			20 years and over		
Senile	–	2	2	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral arteriosclerosis	1	3	4	–	1	1	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
General paralysis	3	1	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With cerebral syphilis	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With Huntington's chorea	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–
With brain tumor	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With other brain or nervous diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Alcoholic	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–	1	–	1
With other somatic diseases	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manic-depressive	–	1	1	–	1	1	1	–	1	–	1	1	1	1	2	1	1	2	–	–	–
Dementia praecox	–	1	1	–	1	1	1	2	3	1	1	2	–	1	1	1	4	5	4	4	8
Paranoia and paranoid conditions	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–
Epileptic psychoses	1	–	1	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	–
With psychopathic personality	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
With mental deficiency	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1
Total	5	9	14	–	4	4	5	2	7	2	3	5	1	2	3	2	5	7	6	4	10

TABLE 19. *Average Length of Hospital Stay During the Present Admission of All Cases in Residence on September 30, 1933*

PSYCHOSES	Number			Average Length of Residence in Years		
	M.	F.	T.	M.	F.	.T
1. Traumatic	7	–	7	1.63	–	1.63
2. Senile	10	34	44	4.29	6.65	6.11
3. With cerebral arteriosclerosis	75	91	166	2.85	2.72	2.78
4. General paralysis	30	9	39	3.85	8.04	4.82
5. With cerebral syphilis	5	1	6	3.09	1.50	2.83
6. With Huntington's chorea	1	–	1	4.50	–	4.50
7. With brain tumor	2	1	3	2.00	3.50	2.50
8. With other brain or nervous diseases	10	4	14	5.69	1.73	4.56
9. Alcoholic	41	10	51	11.49	12.29	11.65
10. Due to drugs and other exogenous toxins	1	2	3	7.50	10.50	9.50
11. With pellagra	–	–	–	–	–	–
12. With other somatic diseases	1	7	8	17.50	3.04	4.85
13. Manic-depressive	72	145	217	3.74	5.55	4.95
14. Involution melancholia	11	30	41	2.27	6.29	5.15
15. Dementia praecox	291	470	761	10.23	8.92	9.42
16. Paranoia and paranoid conditions	3	5	8	30.83	25.50	27.50
17. Epileptic psychoses	9	6	15	2.27	2.83	2.49
18. Psychoneuroses and neuroses	4	5	9	4.24	6.30	5.38
19. With psychopathic personality	5	9	14	7.50	5.14	5.98
20. With mental deficiency	46	39	85	9.64	7.16	8.50
21. Undiagnosed psychoses	–	–	–	–	–	–
22. Without psychoses.	4	8	12	1.73	5.11	3.98
Total.	628	876	1,504	7.72	7.36	7.51

TABLE 20. *Family Care Department*

	Male	Female	Total
Remaining in Family Care October 1, 1932	10	17	27
On Visit from Family Care October 1, 1932	1	2	3
Admitted during the year	3	4	7
Whole number of cases within the year	14	23	37
Dismissed within the year	5	6	11
Returned to Institution	3	4	7
Discharged	1	–	1
On Visit	1	2	3
Remaining in Family Care September 30, 1933	12	16	28
Supported by State	–	1	1
Private	12	15	27
Number of different persons within the year	14	23	37
Number of different persons dismissed	5	6	11
Number of different persons admitted	3	4	7
Average daily number in Family Care during the year	11.791	17.017	28.808
Supported by State	–	1.000	1.000
Private	11.791	16.017	27.808